

WHAT IS CLAIMED IS:

1. A system for surface production of gas from a subterranean zone, comprising:
  - a first well bore extending from the surface into the earth;
  - 5 a second well bore extending from the surface into the earth;
  - the first and second well bores coupled to each other at a junction in the earth;
  - a drainage well bore pattern comprising one or more lateral well bores, the drainage well bore pattern coupled to the junction and operable to conduct fluids from a subterranean zone to the junction; and
  - 10 wherein gas may be produced from the subterranean zone to the surface through the first well bore.
2. The system of Claim 1, wherein the subterranean zone comprises a coal seam.  
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3. The system of Claim 1, wherein the gas comprises coal bed methane gas.
4. The system of Claim 1, wherein the first well bore is substantially  
20 vertical.
5. The system of Claim 1, wherein the first and second well bores are coupled to each other at a cavity in the earth.
- 25 6. The system of Claim 1, wherein the drainage well bore pattern comprises three or more laterals.
7. The system of Claim 1, wherein the drainage well bore pattern comprises four or more laterals.  
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8. The system of Claim 1, wherein the drainage well bore pattern comprises at least two laterals on each side of a main drainage bore.

9. The system of Claim 8, wherein the laterals on at least one side of the main drainage bore progressively shorten in a direction away from at least one of the first and second well bores.

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10. The system of Claim 1, wherein the drainage well bore pattern comprises a horizontal bore with a plurality of lateral bores extending therefrom.

11. The system of Claim 1, wherein the second well bore is slanted or articulated from horizontal.

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12. The method of Claim 1, wherein the drainage well bore pattern is formed by drilling through the second well bore.

13. The system of Claim 1, further comprising a sump formed below the junction.

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14. The system of Claim 1, wherein the drainage well bore pattern is substantially formed on one side of the junction.

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15. The system of Claim 1, wherein water may also be produced from the subterranean zone to the surface through at least one of the first or second well bores.

16. The system of Claim 15, further comprising a pumping unit operable to remove water from the subterranean zone to the surface through at least one of the first or second well bores.

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17. The system of Claim 16, wherein the pumping unit comprises an inlet positioned to limit drawing in debris or other material disposed within a sump.

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18. The system of Claim 16, the pumping unit comprising a rod pumping unit.

19. The system of Claim 16, the pumping unit comprising an inlet positioned to limit gas interference.

5           20. The system of Claim 1, wherein the drainage well bore pattern comprises a main bore and a plurality of generally symmetrically arranged lateral bores on each side of the main bore.

10           21. The system of Claim 1, whereby gas and water may be simultaneously produced substantially uniformly from an area of the subterranean zone through the drainage well bore pattern.

15           22. The system of Claim 21, wherein the area of the subterranean zone comprises relatively equal length to width ratios.

            23. The system of Claim 1, wherein the drainage well bore pattern comprises a substantially horizontal pattern.

20           24. The system of Claim 7, wherein the lateral bores are progressively shorter as they progress away from at least one of the first and second well bores.

25. A system for accessing a subterranean zone from the surface, comprising:

a first well bore extending from the surface to the subterranean zone;

a second well bore extending from the surface to the subterranean zone, the  
5 second well bore intersecting the first well bore at a junction proximate the subterranean zone; and

a well bore pattern including a main well bore and connected to the junction and operable to drain fluid from a region of the subterranean zone to the junction.

10 26. The system of Claim 25, wherein the subterranean zone comprises a coal seam.

27. The system of Claim 25, wherein gas may be produced from the subterranean zone to the surface through the first well bore.

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28. The system of Claim 25, wherein the first well bore is substantially vertical.

29. The system of Claim 25, wherein the first and second well bores are  
20 coupled to each other at a cavity in the earth.

30. The system of Claim 25, wherein the drainage well bore pattern comprises two or more laterals.

25 31. The system of Claim 25, wherein the drainage well bore pattern comprises four or more laterals.

32. The system of Claim 25, wherein the drainage well bore pattern comprises at least two laterals on each side of the main drainage bore.

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33. The system of Claim 32, wherein the laterals on at least one side of the main drainage bore progressively shorten in a direction away from at least one of the first and second well bores.

5        34. The system of Claim 25, wherein the drainage well bore pattern comprises a horizontal bore with a plurality of lateral bores extending therefrom.

35. The system of Claim 25, wherein the second well bore is slanted or articulated from horizontal.

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36. The method of Claim 25, wherein the drainage well bore pattern is formed by drilling through the second well bore.

15        37. The system of Claim 25, further comprising a sump formed below the junction.

38. The system of Claim 25, wherein the drainage well bore pattern is substantially formed on one side of the junction.

20        39. The system of Claim 27, wherein water may also be produced from the subterranean zone to the surface through at least one of the first or second well bores.

40. The system of Claim 39, further comprising a pumping unit operable to remove water from the subterranean zone to the surface through at least one of the  
25 first or second well bores.

41. The system of Claim 40, wherein the pumping unit comprises an inlet positioned to limit drawing in debris or other material disposed within a sump.

30        42. The system of Claim 40, the pumping unit comprising a rod pumping unit.

43. The system of Claim 40, the pumping unit comprising an inlet positioned to limit gas interference.

44. The system of Claim 25, wherein the drainage well bore pattern  
5 comprises the main bore and a plurality of generally symmetrically arranged lateral bores on each side of the main bore.

45. The system of Claim 25, whereby gas and water may be  
simultaneously produced substantially uniformly from an area of the subterranean  
10 zone through the drainage well bore pattern.

46. The system of Claim 45, wherein the area of the subterranean zone comprises relatively equal length to width ratios.

15 47. The system of Claim 25, wherein the drainage well bore pattern comprises a substantially horizontal pattern.

48. The system of Claim 30, wherein the lateral bores are progressively shorter as they progress away from at least one of the first and second well bores.

49. A method for accessing a subterranean zone from the surface, comprising:

forming a first well bore extending from the surface to the subterranean zone;

forming a second well bore extending from the surface to the subterranean  
5 zone, the second well bore intersecting the first well bore at a junction proximate the subterranean zone; and

forming a well bore pattern including a main well bore and connected to the junction and providing drainage of fluids from the subterranean zone to the junction for production to the surface.

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50. The method of Claim 49, wherein the subterranean zone comprises a coal seam.

51. The method of Claim 49, further comprising producing gas from the  
15 subterranean zone to the surface through the first well bore.

52. The method of Claim 49, wherein the first well bore is substantially vertical.

53. The method of Claim 49, wherein the first and second well bores are  
20 coupled to each other at a cavity in the earth.

54. The method of Claim 49, wherein the drainage well bore pattern comprises two or more laterals.

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55. The method of Claim 49, wherein the drainage well bore pattern comprises four or more laterals.

56. The method of Claim 49, wherein the drainage well bore pattern  
30 comprises at least two laterals on each side of the main drainage bore.

57. The method of Claim 56, wherein the laterals on at least one side of the main drainage bore progressively shorten in a direction away from at least one of the first and second well bores.

5 58. The method of Claim 49, wherein the drainage well bore pattern comprises a horizontal bore with a plurality of lateral bores extending therefrom.

59. The method of Claim 49, wherein the second well bore is slanted or articulated from horizontal.

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60. The method of Claim 49, further comprising drilling through the second well bore to form the drainage well bore pattern.

15 61. The method of Claim 49, further comprising forming a sump below the junction.

62. The method of Claim 49, wherein the drainage well bore pattern is substantially formed on one side of the junction.

20 63. The method of Claim 51, further comprising producing water from the subterranean zone to the surface through at least one of the first or second well bores.

25 64. The method of Claim 63, further comprising operating a pumping unit operable to remove water from the subterranean zone to the surface through at least one of the first or second well bores.

65. The method of Claim 64, further comprising positioning an inlet of the pumping unit to limit drawing in debris or other material disposed within a sump.

30 66. The method of Claim 64, the pumping unit comprising a rod pumping unit.



67. The method of Claim 64, further comprising positioning an inlet of the pumping unit to limit gas interference.

68. The method of Claim 49, wherein the drainage well bore pattern  
5 comprises the main bore and a plurality of generally symmetrically arranged lateral bores on each side of the main bore.

69. The method of Claim 49, further comprising simultaneously producing gas and water substantially uniformly from an area of the subterranean zone through  
10 the drainage well bore pattern.

70. The method of Claim 69, wherein the area of the subterranean zone comprises relatively equal length to width ratios.

71. The method of Claim 49, wherein the drainage well bore pattern  
15 comprises a substantially horizontal pattern.

72. The method of Claim 54, wherein the lateral bores are progressively shorter as they progress away from at least one of the first and second  
20 well bores.